FEMA's Latest Multi-Hazard Software

HAZUS®MH

EARTHQUAKE · WIND · FLOOD

What Could Happen?

How can we plan to minimize damage and loss of life in order to prevent natural hazard events from becoming natural disasters? Which buildings, roads, and bridges may be damaged and how great would the damage be? Which roads may be closed? Which areas may be affected if utilities failed? Which businesses will shut down?

How Can HAZUS®MH Help?

An important part of comprehensive community planning is understanding risks that may affect the physical, social, and economic components of a community. Communities who understand their vulnerability to natural hazards can make development decisions in light of those hazards and the risks associated with them.

FEMA introduces its latest risk assessment and loss estimation software package, **HAZUSMH** (Multi-Hazard – earthquake, hurricane wind, and flood), that can help answer complex questions about the consequences of a hazard event.

What Are the Impacts of a Hazard Event?

HAZUSMH helps states, communities, and businesses, prepare for, mitigate the effects of, respond to, and recover from a hazard event. One of the great strengths of **HAZUSMH** is that it provides estimates of hazard-related damage before a disaster occurs and takes into account various impacts of a hazard event such as:

- Physical damage: damage to residential and commercial buildings, schools, critical facilities, and infrastructure
- Economic loss: lost jobs, business interruptions, repair and reconstruction costs
- Social impacts: impacts to people, including requirements for shelters and medical aid

HAZUSMH and Its Unique Features

HAZUSMH can quantify the risk for a study area of any size: region, state, community, neighborhood, or an individual site. **HAZUSMH** uses GIS technology to combine hazard layers with national databases and applies a standardized loss estimation and risk assessment methodology. The GIS-based environment allows users to create graphics to help communities visualize and understand their hazard risks and solutions. The nationwide databases built into **HAZUSMH** include datasets on demographics, building stock, essential facilities, transportation, utilities, and high-potential-loss facilities.

HAZUSMH can estimate losses from earthquakes, hurricane winds, and floods. **HAZUSMH** uses:

- Ground motion and ground failure information to calculate losses for earthquakes
- Information on wind pressure, windborne missiles, and rain for hurricane winds
- Flood frequency, depth, discharge, and velocity for floods